

CENTRE FOR ENVIRONMENT, FISHERIES AND AQUACULTURE SCIENCE,
LOWESTOFT, SUFFOLK, ENGLAND

DRAFT 2003 RESEARCH VESSEL PROGRAMME

PROGRAMME: RV CORYSTES: CRUISE 11

STAFF:

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NUIG – National University of Ireland Galway

IMI – Irish Marine Institute

DURATION: 14th August – 27th August

Approx Sailing Time 11:00 BST (HW 10:30 GMT)

Approx Docking Time 09:00 BST on 27th (HW 09:00 GMT)

LOCALITY: Western English Channel

AIMS:

This cruise includes recovery of instrumentation deployed during cruise 8. The work is generally aimed at achieving a better understanding of the dynamics of the circulation processes of the Western English Channel. Specifically, this aims to better characterise the extent and nature of density-driven and seasonal jet-like circulations which may act as direct and rapid pathways for transport of material. The existence of exotic species in the western Channel region is evidence of the potential pathway from the Bay of Biscay or mouth of the Gironde to the UK and Irish coasts. One specific cruise aim is to sample the dinoflagellate *Gyrodinium Aureolum* (now renamed *Kareni Miximotoi*), which is of interest due to links to harmful algal blooms, especially in Irish waters. The mixing structure in the bottom region (up to 30 m above bed) is also of interest, and 2 thermistor chains and 2 ADCPS will be deployed for the period between cruises 8 and 11 for comparisons with models.

The main sampling aims of the cruise are:

1. Recover ARGOS drifting buoys.
2. Recover Moorings (ADCP and thermistor chain).
3. To characterise the hydrographic structure associated with frontal regions and investigate the transport pathways by use of towed undulating CTDs.
4. To map and quantify the extent of *Gyrodinium Aureolum* (by water samples from CTD Rosette)

PLAN (all times GMT):

RV CORYSTES will sail at approximately 10:00 14th August, proceed through the channel to commence work with scanfish sections from 49° 30.0' N 3° 0.0 W to 49° 30.0' N 7° 0.0 W, then undertake sampling for phytoplankton. Recovery of ARGOS buoys and moorings will be undertaken as appropriate.

Corystes will return to Lowestoft on the morning tide of the 27th.

Liam Fernand
(Scientist-in-Charge)
24 June 2003

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